

The Commissioner for PatentsREMARKS

The Examiner has rejected the affidavit submitted with the Response to Final Office Action dated December 8, 2003 for two reasons. The first reason is that an affidavit or declaration is inappropriate under 37 C.F.R. 1.131(a) when the reference is claiming the same patentable invention (§1.131(a)(1)).

As per 37 C.F.R. 1.601(n) of the Patent Rules:

"Invention 'A' is the same patentable invention as an invention 'B' when invention 'A' is the same as (35 U.S.C. 102) or is obvious (35 U.S.C. 103) in view of invention 'B' assuming invention 'B' is prior art with respect to invention 'A'. Invention 'A' is a separate patentable invention with respect to invention 'B' when invention 'A' is new (35 U.S.C. 102) and non-obvious (35 U.S.C. 103) in view of invention 'B' assuming invention 'B' is prior art with respect to invention 'A'."

The Applicant hereby submits that the present application is not claiming the same patentable invention as the reference. The present application concerns a user selectable hardware zoom implemented in a display controller. The system controls a main display device and at least one zoom display device using a single memory surface. One of the main purposes of the system is to allow a user to select fixed frame or fractional portions of a surface displayed on the main display device, and output scaled versions on the zoom display devices. To operate the zoom, the user must first select a portion of the main display surface using a hardware cursor. Once the portion is selected, the resolution of the zoom display device intended to display a scaled version of the selected portion is determined by the system or by user input. The system can thereafter adjust the aspect ratio of the selected portion according to the given resolution. The adjusted portion is then scaled according to the given resolution of the screen or according to the scaling parameters given by the user. The scaled version, saved in memory, can be accessed by a second display controller and displayed on one of the zoom display devices. The only steps performed at the application level are the ones involving user input, detection of resolution, and aspect ratio adjustments. The

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other steps being implemented at the hardware level, the present controller is much quicker and more efficient than its counterparts are.

The claims of the present invention, and more specifically claims 1 and 21, clearly define the scope of the invention to correspond to the above description of the invention, as enabled by performing the steps of the method claims. Claim 1 is directed towards a method of controlling a display controller system to provide a display surface zoom, the display controller system having a main surface memory and at least one zoom display device, and comprises the steps of:

1. Receiving user input defining coordinates of a frame portion within the main surface in the frame buffer memory.
2. Determining a resolution of at least one of the zoom display devices and adjusting an aspect ratio of the portion defined by the user input to correspond to the resolution.
3. Programming the display controller system to implement the display surface zoom.
4. Scaling the portion of the main surface in the frame buffer memory.
5. Converting the scaled portion of the main surface memory into a display signal.
6. Outputting the display signal to at least one of the zoom display devices.

Claim 21 is directed towards a method of controlling a display controller system to provide a display surface zoom, the display controller system having a main surface memory and at least one zoom display device, and comprises the steps of :

1. Receiving user input defining a fractional portion of the main surface in the frame buffer memory to be scaled and displayed, the fractional portion being a non-integer fraction of the main surface of the frame buffer memory.
2. Determining a resolution of at least one of the zoom display devices and adjusting an aspect ratio of the portion defined by the user input to correspond to the resolution.

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3. Programming the display controller system to implement the display surface zoom.
4. Scaling the portion of the main surface in the frame buffer memory.
5. Converting the scaled portion of the main surface in the frame buffer memory into a display signal.
6. Outputting the display signal to at least one of the zoom display devices.

US patent 6,515,678 to Boger does not claim the same patentable invention. As stated in the summary of the invention in the '678 reference, the invention is directed to a system and method for magnifying a display of video data.

"By utilizing the present invention, a user may view an overall display of video data formatted for display in a high resolution on a low resolution display device, yet still view portions of the video data in detail on the low resolution device. In accordance with a first aspect of the invention, a system for magnifying a display of data includes a receiver for receiving a first set of video data including video data formatted for display in a first resolution. A translator is also included for translating the first set of video data formatted for display in the first resolution to a second set of video data formatted for display in a second resolution, the second resolution is a lower resolution than the first resolution. A magnifier is also included for magnifying a display of video data by formatting the first set of video into a third set of video data. The third set of video data is capable of display on a display device suitable for displaying video data in the second resolution and incapable of displaying video data in the first resolution, wherein the third set of video data being in an enlarged format with respect to the second set of video data.

In accordance with a second aspect of the invention, a method for magnifying a display of data, a first set of video data formatted for display in a first resolution is translated to a second set of video data formatted for display in a second resolution. The second resolution is a lower resolution than the first resolution. The second set of video data is capable of being displayed on a display device capable of displaying data in the second resolution and incapable of displaying data in the first resolution. The display of video data is magnified by formatting the first set of video into a third set of video data so that the third set of video data is capable of display on the display device. The third set of video data is in an enlarged format with respect to the second set of video data." (column 2, lines 1-34)

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It is clear from the above that the objective of the claimed invention by Boger is to enable a user to view high-resolution data on a low-resolution display device. This is also evidenced by the claims presented by Boger. An objective of the invention of the present application is to provide a method for implementing a hardware zoom in which a user specifies a point and a dimension of a window or frame associated with the point within a main display, and the hardware zoom automatically scales a maximum portion of the window selected to a full screen view. The full screen zoom may be provided on a different display than the main display, with the main display remaining unchanged by the selection. This allows the user to simply define any area on the display using an input device with the result that the window automatically gets scaled full screen. This offers the flexibility of not limiting the user to determine a scale factor, but to instead define the area that they are interested in working on and having it zoomed full screen to the desired display and resolution. Once the frame has been defined, the frame can be moved relative to the movement of an input device if a panning feature is enabled. Another objective of the invention of the present application is to provide a method for implementing a hardware zoom which allows for a non-integer fraction of a main display surface memory to be zoomed. Such non-integer fractions, as user defined by selecting a zoom window using a GUI, provide a more user friendly operation. There is no correspondence between the claimed inventions of Boger and the present application and therefore, an affidavit under §1.131(a) to establish invention of the subject matter of the rejected claims prior to the effective date of the Boger reference is appropriate.

The Examiner has also rejected the affidavit provided with the Response to Final Office Action because the affidavit was made by a person not qualified under 37 C.F.R. 1.42, 1.43, or 1.47 to make the declaration. The Applicant agrees with the Examiner and hereby submits a set of affidavits signed by all 6 of the inventors of the present application.

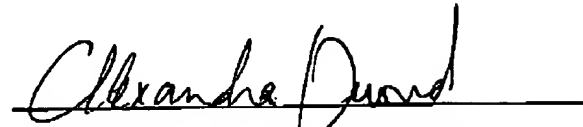
Therefore, since the affidavits provided herewith are appropriate and comply with all of the requirements of §1.131(a) of the Patent Rules, the Applicant believes that all issues have been addressed and the present application is now in good standing. A notice of allowance for claims 1-30 is respectfully requested.

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Respectfully submitted,

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April 30, 2004
Date